

App. No. 09/992,668
Amdt. Dated March 14, 2005
Reply to Office Action of December 13, 2004
Atty. Dkt. No. 8591-103 (formerly docket No. 025505-2005)

REMARKS/ARGUMENTS

This reply is responsive to an Office Action dated on December 13, 2004. Claims 4-28 were pending in the subject application.

Independent claims 14, 15, and 27 have been amended to clarify the language of the claims. The amendments to the claims were made to render them more clear and definite and to emphasize the patentable novelty thereof. There is no intention of surrendering equivalence.

New claims 39 and 40 have been added to emphasize the patentable novelty of the invention and are directed to a method of determining in real-time, the location of a group of members within a defined environment.

Please note that all paragraph citations for the Applicants' specification for the above-identified application refer to the paragraph numbers as published in U.S. Publication No. 2002/0080198 A1 and not the paragraph numbers in the Applicants' originally filed application.

Claim Rejections - 35 U.S.C. Section 103(a)

Claims 4-15 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,897,421 to Chuang in view of U.S. Patent No. 5,914,671 to Tuttle and further in view of U.S. Patent 5,652,570 to Lepkofker. In light of the Examiner's remarks in the Office Action, it is presumed that the Office Action intended to state that Claims 4-38 have been rejected instead of claims 4-15.

Chuang discloses the use of a group of 2-way pagers (GID devices) carried by guests as they move through a theme park. The pagers send request information to Identification Signal Searching Units (ISSU) of a Central Control System (CCS) installed throughout the park for determining the location of particular persons. The CCS determines the location and direction of a desired person relative to the requesting person. Once located, a message is sent to the requesting two-way

App. No. 09/992,668
Amdt. Dated March 14, 2005
Reply to Office Action of December 13, 2004
Atty. Dkt. No. 8591-103 (formerly docket No. 028803-2005)

pager and describes the distance and the direction of the desired person relative to the requesting person.

Thus, the location of the desired person must first be determined by means of the CCS. That is accomplished by a search technique as stated in Column 11, lines 52-59 of Chuang:

"Should a guest wish to locate another guest from his group, he simply selects the proper designation on his GID device. A wireless signal is transmitted from the GID device and is received by at least the nearest ISSU. The ISSU transmits the search signal in an attempt to locate the targeted GID device. If the GID device is found, its location and direction is relayed back to the ISSU which then forwards the information to the searching GID Device. In the event that the GID Device is not found, the search signal is relayed to the CCS via the ISSU. The CCS forwards the search signal to all ISSUs thus effectively blanketing the park. Once the targeted GID Device is located, its location and direction is relayed back to the ISSU which sent the original search signal via the CCS."

Unlike Chuang, Applicants specify in amended claim 14 the following:

- 1) "determining continuously location information of each member . . . as said members move within the defined environment";
- 2) "providing said location information substantially simultaneously for a plurality of group members having tags";

App. No. 09/992,668
Amdt. Dated March 14, 2005
Reply to Office Action of December 13, 2004
Atty. Dkt. No. 8591-103 (formerly docket No. 025505-2005)

- 3) "displaying a map of at least a portion of said defined environment on a monitor of the activated identification station";
- 4) "a plurality of different person icons representing each of the members of the group having tags";
- 5) "displaying a plurality of the person icons on the map, and positioning the person icons on the map according to the relative location of the members of the group within the defined environment."

Each one will now be considered.

1) Determining Continuously Location Information.

Chuang does not determine continuously location information as specified in claim 14 as amended, but instead performs searches for the location of the individual 2-way pager carried by another group member, only in response to a request. The search is only conducted on demand. Once a request is sent from a GID device, a search is conducted first by the nearest ISSU to determine the location of a single guest. This may or may not result in the location of the desired guest. If not, then the search is expanded throughout all of the ISSU units distributed throughout the area. Therefore, such a searching operation is time consuming, especially when emergency situations have arisen.

2) Providing Said Location Information Substantially Simultaneously.

Chuang does not provide location information substantially simultaneously for a plurality of group members, as specified in claim 14 as amended. Instead, Chuang teaches searching for a single 2-way pager. If more than one person's location is desired, it would require sending requests one at a time to receive the directions one at a time. Such an approach would, of course, be time consuming and awkward.

App. No. 09/992,668
Amdt. Dated March 14, 2006
Reply to Office Action of December 13, 2004
Atty. Dkt. No. 8591-103 (formerly docket No. 025505-2005)

As disclosed in the Chuang patent, once the person is located, a message is sent to the two-way pager carried by the person requesting the information. The message provides directions as to the location of the other guest. The approximate distance from the person being located relative to the person requesting the information is specified in the message. Also, the direction of the person being located relative to the requesting person is then provided as well. This information must then be used by inspecting one of the maps which are distributed throughout the park for display (see Column 12, lines 18 and 19). This requires a possible further delay in attempting to find one of the maps, and then utilizing the directions from a message attempting to find a suitable pathway to the other guest.

Thus, valuable time can be wasted in an emergency using such a method and apparatus as disclosed in the Chuang patent. Additionally, such unwanted delays can also occur where there is a large group of guests which desire to remain in communication with another. For example, when a large group of tourists is ready to leave the park, it is desirable to quickly ascertain the location of all of the members of the group. Using the method of the Chuang patent, a separate search would have to be conducted for each member of the group. There would have to be separate directions for each individual member of the group, and then separate pathways would need to be determined from a map in the park. As the size of the group increases, the delays associated with the determining of the locations of all the group members also increases with the Chuang approach.

3) Displaying a Map.

Chuang does not suggest "displaying a map of at least a portion of said defined environment on a monitor of the activated identification station" as specified in Claim 14 as amended. In this regard, Chuang does not disclose an "identification station," nor "displaying a map" on it. On the other hand, Chuang discloses sending directions to a 2-two pager.

App. No.09/992,868
Amdt. Dated March 14, 2005
Reply to Office Action of December 13, 2004
Atty. Dkt. No. 8591-103 (formerly docket No. 025505-2005)

Chuang discloses providing location information via the text screen of the paging device. (See Col. 12, lines 8-11.) Therefore, Chuang does not teach, nor suggest, the Applicants' approach of using "identification stations distributed throughout the defined environment" to provide "said location information."

4) A Plurality of Different Person Icons.

Chuang does not disclose, nor suggest, "a plurality of different person icons representing each of the members of the group having tags" as specified in claim 14 as amended. Chuang does not teach the use of icons, but merely teaches the sending of messages with directions. Also, Chuang discloses sending a single message.

5) Positioning the Person Icons on the Map.

There is no disclosure, nor suggestion, in the Chuang patent of "displaying a plurality of the person icons on the map, and positioning the person icons on the map according to the relative location of the members of the group within the defined environment" as specified in claim 14 as amended. Chuang does not teach "icons," and thus does not suggest "positioning the person icons on the map."

Therefore, the claims as amended patentably distinguish over Chuang.

The Tuttle patent discloses short range RFID tags for responding to people and other items within an airport environment. The Tuttle system incorporates antennas at monitors within the airport to interrogate RFID devices worn by users or incorporated on objects disposed near the monitor.

While Tuttle teaches the use of short range RFID devices, claim 14 as amended specifies "long range identification tag." Moreover, substituting the Tuttle short range RFID devices for the Chuang 2-way pagers would render the Chuang system inoperable. The short range RFID devices would not be capable of receiving

App. No. 09/992,668
Amdt. Dated March 14, 2005
Reply to Office Action of December 13, 2004
Atty. Dkt. No. 8591-103 (formerly docket No. 025505-2005)

Chuang's messages with the location directions. The Tuttle RFID devices do not have a means for receiving messages. Also, the Tuttle short range devices could not readily be located, as the person to be located would have to be positioned in close proximity to a detector when the Chuang search is being conducted.

Therefore, there is no motivation to combine the teachings of Chuang and Tuttle.

Thus, the claims as amended patentably distinguish over Tuttle, either taken alone or in combination with Chuang.

The Lepkofker patent discloses a system for displaying a map and tracking the location of a single person from place to place for medical purposes. As indicated in FIG. 11 of the Lepkofker patent, destination points and directions of travel are illustrated on a map using a line representing the path of travel of the person in question.

Lepkofker suggests the use of a map to illustrate the path of travel of a person. However, there is no motivation to combine the Lepkofker map with the Chuang system. There is no teaching, nor suggestion, of substituting the Lepkofker map for the Chuang messages containing location directions. If such a substitution were somehow made, there still would only be information concerning a single person only.

There is no statement of any rationale for motivation for the combining of the Lepkofker and Chuang references. It is not proper to reject the claims based on a combination of references where conclusory statements are made to deal with the particular combinations of prior art and specific claims.

Moreover, "a plurality of different person icons," is specified in claim 14 as amended whereas Lepkofker indicates the track of a missing single person using

App. No. 09/992,668
Amdt. Dated March 14, 2005
Reply to Office Action of December 13, 2004
Atty. Dkt. No. 8591-103 (formerly docket No. 025505-2005)

only a line. (See FIG. 11.) Therefore, Lepkofker does not teach, nor suggest, displaying "different person icons." Lepkofker discloses only displaying a line for a single person at one time.

If the teachings of Lepkofker and/or Tuttle were somehow combined with the Chuang teachings, the resulting hypothetical combination would still not anticipate the combination of claim 14 as amended as mentioned in connection with the discussion of the Chuang patent. The addition of the Tuttle short range RFID device and the Lepkofker map to the Chuang system would not provide a system and method that can provide location information for a whole group substantially simultaneously in a fast and facile manner.

Thus, the claims 4 – 38 as amended patentably distinguish over Chuang, either taken alone or in combination with Tuttle and Lepkofker.

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Respectfully submitted,

Date: March 14, 2005

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